

<b>Notice of Allowability</b>	Application No.	Applicant(s)
	09/807,459	IKADAI ET AL.
	Examiner	Art Unit
	Padmavathi v Baskar	1645

-- **The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to 12/31/03.
2.  The allowed claim(s) is/are 4, 5 and 11 have been renumbered as 1-3 respectively.
3.  The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*
  - c)  None
 of the:
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of
 Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application (PTO-152)
6.  Interview Summary (PTO-413),  
Paper No./Mail Date 3/4/2004.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other \_\_\_\_\_.

  
**LYNETTE R. F. SMITH**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 1600**

## **Detailed Action**

### ***Response to Amendment***

1. The after final amendment filed on 12/31/03 has been entered into the record. Claims 4 and 5 have been amended. Claim 6 is cancelled. Claims 1-3, 7-10 and 12-13 are withdrawn from consideration as non-elected invention, said election made 10/16/02 without traverse. Claims 4-5 and 11 are under examination.

### ***Rejections Withdrawn***

2. In view of amendment to the claims 4 –5, cancelation of claim 6 and arguments of record, the rejection of claims 4-5 and 11 under 35 U.S.C. 102(b) as being anticipated by Bose et al 1992 (International Journal of Parasitology, 22; 627-630) is withdrawn.

3. In view of amendment to the claims 4 –5, cancelation of claim 6, the rejection of claims 4-5 under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for an isolated recombinant protein, said protein has the amino acid sequence shown in SEQ.ID.NO: 2 does not reasonably provide enablement for recombinant protein, where in said recombinant protein has the amino acid sequence shown in SEQ.ID.NO: 2 with one to several amino acid residues therein being deleted, substituted or added. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims is withdrawn.

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mark weiner on 3/4/04

The application has been amended as follows:

Claim 5, line2, before protein, inserted -- recombinant --

Claim 5, line 2, deleted " is immunologically "

Claim 5, line 3, deleted " reactive with " and inserted therefor -- binds to --

Claim 5, line 3 after antiserum, deleted " elicited by a 48kDa"

Claim 5, line 4, deleted " protein of rhoptry of " -- and inserted therefor -- obtained from horses Infected with --

5. The claims 4-5 and 11 are now directed to an isolated recombinant protein from merozoite of Babesia caballi, wherein said protein is expressed in a host cell transformed with DNA vector into which CDNA having the nucleotide sequence encoding the amino acid sequence as shown in SEQ ID NO: 2 is incorporated into the DNA vector and said recombinant protein binds to an antiserum obtained from horses infected with B.caballi.

The claims define over Bose et al as the prior art does not teach an isolated recombinant protein having the amino acid sequence SEQ.ID.NO: 2. This novel recombinant protein is isolated and characterized and specifically binds to antiserum obtained from horses experimentally infected B.caballi merozoites.

#### ***Status of Claims***

6. Claims 4-5and 11 are allowed and have been renumbered as 1-3 respectively.

Claims 1-3, 7-10 and 12-13 are canceled as drawn to non-elected invention, said election made on 10/16/02 without traverse.

7. Papers related to this application may be submitted to Group 1600, AU 1645 by facsimile transmission. Papers should be transmitted via the PTO Fax Center, which receives transmissions 24 hours a day and 7 days a week. The transmission of such papers by facsimile must conform with the notice published in the Official Gazette, 1096 OG 30, November 15, 1989. The RightFax number for submission of before-final amendments is (703) 872-9306. The RightFax number for submission of after-final amendments is (703) 872-9307.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Padma Baskar Ph.D., whose telephone number is ((571) 272-0853. A message may be left on the Examiner's voice mail system. The Examiner can normally be reached on Monday to Friday from 6.30 a.m. to 4.00 p.m. except First Friday of each bi-week.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynette Smith can be reached on (571) 272-0864. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1600.

Padma Baskar Ph.D.

2/28/04